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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,923	03/08/2005	Robert Peter Scholl	DE 020208	7553

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
HINES, ANNE M	
ART UNIT	**PAPER NUMBER**
2879	
MAIL DATE	**DELIVERY MODE**
07/01/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,923	SCHOLL ET AL.	
	Examiner	Art Unit	
	ANNE M. HINES	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed on March 10, 2008, has been entered and acknowledged by the Examiner.

Claims 1-7 are pending in the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholl et al. (US 2002/0047525) in view of Mehrotra et al. (US 5847497).

Regarding claim 1, Scholl teaches a low-pressure gas discharge lamp equipped with a gas-discharge vessel containing an inert gas filling as the buffer gas and an induium, thallium, and/or copper halide (Fig. 1; Page 2, Paragraphs [0023], [0026], and [0027]), and with composite tungsten electrodes (Fig. 1; Page 2, Paragraph [0034]) and with means for generating and maintaining a low-pressure gas discharge. Scholl fails to teach an electron emitter within the group claimed in claim 1.

In the same field of endeavor of composite tungsten electrodes for low-pressure lamps (Column 1, lines 32-36; Column 1, lines 39-44), Mehrotra teaches wherein a composite tungsten and barium titanate electrode is used (Column 4, lines 48-54;

Column 5, lines 40-48) in order to balance electrical resistivity, thermal conductivity, and mechanical properties (Column 7, lines 1-7).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the invention of Scholl to have the tungsten and barium titanate composite electrodes disclosed by Mehrohtra in order to balance the electrical resistivity, thermal conductivity, and mechanical properties of the electrodes.

Regarding claim 2, Scholl and Mehrotra teach the invention of claim 1 but fail to specifically disclose wherein a reduced emitter substances are used as the electron emitter substance. However, the Examiner notes that Applicant's specification discloses that the reduced emitter substances characteristically form from use of the electrodes during operation of the lamp (Page 3, line 33 to Page 4, line 3). Therefore, Scholl and Mehrotra disclose the invention of claim 2, including the claimed reduced emitter substances, since they would characteristically be formed by use of the invention disclosed by School and Mehrotra.

Regarding claim 3, Scholl further discloses wherein the inert buffer gas is argon (Page 2, Paragraph [0026]).

Regarding claim 4, Scholl further discloses wherein the gas discharge vessel is coated with a fluorescent coating on its outside surface (Page 2, Paragraph [0035]).

Regarding claim 5, Scholl teaches a lamp comprising and indium halide gas (Fig. 1; Page 2, Paragraphs [0023], [0026], and [0027]) and composite tungsten electrodes (Fig. 1; Page 2, Paragraph [0034]). Mehrotra teaches composite barium titanate and

tungsten electrodes (Column 4, lines 48-54; Column 5, lines 40-48). Since barium titanate alone is not conductive, the Examiner considers that it characteristically functions as a coupling structure for capacitive operation of the discharge. Motivation to combine is the same as for claim 1.

Regarding claim 6, Mehrotra further teaches the use of a barium titanate electron emitter substance as the emitter on a tungsten electrode (Column 4, lines 48-54; Column 5, lines 40-48). Motivation to combine is the same as for claim 1.

Regarding claim 7, Mehrotra further teaches the use of a barium titanate electron emitter substance that has been rendered conductive by means of tungsten additives (Column 4, lines 48-54; Column 5, lines 40-48; Column 4, lines 64-67). Motivation to combine is the same as for claim 1.

Response to Arguments

Applicant's arguments filed March 10, 2008 have been fully considered but they are not persuasive.

With respect to the Scholl reference, Applicant argues that the reference does not disclose or recognize that the use of a tungsten electrode with an oxide emitter may result in the indium compound disappearing from the gas discharge vessel. With respect to the Mehrotra reference, Applicant argues that Mehrotra failed to discover or recognize that the use of $BaTiO_3$ would not result in an indium compound disappearing or at least perceptible disappearing from a gas discharge vessel.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to the combination of Scholl and Mehrotra, Applicant argues that one of ordinary skill in the art would not have known whether a combination of Scholl and Mehrotra would have prevented the disappearance of an indium compound from a gas discharge vessel, since the inventors of the instant application had to conduct experiments to determine this result.

The Examiner respectfully disagrees. In response to applicant's argument that one of ordinary skill in the art wouldn't have known that the claimed emitter material prevented the disappearance of an indium compound from a gas discharge vessel, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Mehrotra recognizes the advantage of a composite tungsten and barium titanate electrode in order to balance electrical resistivity, thermal conductivity, and mechanical properties; as such, the Examiner considers that it would have been obvious to one of ordinary skill in the art to combine the inventions of Scholl and Mehrotra, and therefore maintains the rejection of claims 1-7.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne M. Hines whose telephone number is (571) 272-2285. The examiner can normally be reached on Monday through Friday from 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Anne M Hines/
Patent Examiner
Art Unit 2879

/Nimeshkumar Patel/
Supervisory Patent Examiner, Art Unit 2879

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	10/526,923	SCHOLL ET AL.	
	Examiner	Art Unit	
	ANNE M. HINES	2879	